

AMENDMENTS TO THE CLAIMS

This listing of claims will replace all prior versions and listings of claims in the application:

LISTING OF CLAIMS:

1. (Currently Amended): A peripheral device for a programmable logic controller, the peripheral device comprising:

an inputting means for inputting peripheral device authentication data being the same as the authentication data stored in a storage means of the programmable logic controller;

an encryption means for encrypting the peripheral device authentication data used in authentication for authorizing use of the programmable logic controller peripheral device itself, encrypting data used in the programmable logic controller, and encrypting authentication data that is established in the programmable logic controller and that verifies whether or not communication with the programmable logic controller is authorized for the data used in the programmable logic controller;

an external storage means for storing at least peripheral device authentication data having been encrypted;

an internal storage means for storing at least peripheral device authentication data having been encrypted;

a decryption means for decrypting the peripheral device authentication data, the data used in the programmable logic controller, and the authentication data; and

a verification means for determining whether or not use of the programmable logic controller peripheral device is authorized, by checking peripheral device authentication data read out from the external storage means and decrypted, against peripheral device authentication data read out from the internal storage means and decrypted.

2. (previously presented): A programmable-logic-controller peripheral device according to claim 1, wherein when communication between the programmable logic controller and the programmable logic controller peripheral device is via a network:

the encryption means is further for encrypting network authentication data for authorizing the communication between the programmable logic controller and the programmable logic controller peripheral device;

the external storage means is further for storing the network authentication data;
and

the decryption means is further for decrypting the network authentication data stored in the external storage means.

3. (currently amended): A peripheral device for a programmable logic controller, the peripheral device comprising:

an input unit that enables a user to input peripheral device authentication data being the same as the authentication data stored in a storage unit of the programmable logic controller;

an encrypter that encrypts the peripheral device authentication data used in authentication for authorizing use of the programmable logic controller peripheral device itself, encrypts data used in the programmable logic controller, and encrypts authentication data that is established in the programmable logic controller and that verifies whether or not communication with the programmable logic controller is authorized for the data used in the programmable logic controller;

an external storage that stores at least peripheral device authentication data having been encrypted;

an internal storage that stores at least peripheral device authentication data having been encrypted;

a decrypter that decrypts the peripheral device authentication data, the data used in the programmable logic controller, and the authentication data; and

a verifier that determines whether or not use of the programmable logic controller peripheral device is authorized, by checking peripheral device authentication data read out from the external storage and decrypted, against peripheral device authentication data read out from the internal storage and decrypted.

4. (previously presented): A programmable-logic-controller peripheral device according to claim 1, wherein when communication between the programmable logic controller and the programmable logic controller peripheral device is via a network:

the encrypter is further for encrypting network authentication data for authorizing the communication between the programmable logic controller and the programmable logic controller peripheral device;

the external storage is further for storing the network authentication data; and

the decrypter is further for decrypting the network authentication data stored in the external storage.